

Message

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**From:** Craig, Harry [Craig.Harry@epa.gov]  
**Sent:** 6/6/2015 12:55:57 AM  
**To:** Schanilec, Kevin [Schanilec.Kevin@epa.gov]  
**CC:** Palumbo, Janice [Palumbo.Jan@epa.gov]; Shuster, Kenneth [Shuster.Kenneth@epa.gov]  
**Subject:** FW: Small Arms Ammunition Question  
**Attachments:** ChemicalStabilityCampatability&ShelfLifeofExplosives-Vogelsanger.pdf; PropellantChemistry-Folly&Mader.pdf

Kevin,

# Deliberative Process / Ex. 5

Regards,

Harry

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**From:** Schanilec, Kevin  
**Sent:** Friday, June 05, 2015 5:28 PM  
**To:** Palumbo, Janice; Craig, Harry  
**Subject:** Re: Small Arms Ammunition Question

# Deliberative Process / Ex. 5

Kevin

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**From:** Palumbo, Janice  
**Sent:** Friday, June 5, 2015 3:49 PM  
**To:** Craig, Harry  
**Cc:** Schanilec, Kevin  
**Subject:** RE: Small Arms Ammunition Question

Yes, I agree. Also cc'ing Kevin for his opinion. -Jan

Jan Palumbo (AWT-150)

Environmental Scientist  
U.S. EPA Region 10  
1200 6th Avenue, Suite 900  
Seattle, WA 98101  
(206) 553-6702 (Phone)  
(206) 553-8509 (Fax)

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**From:** Craig, Harry  
**Sent:** Friday, June 05, 2015 3:17 PM  
**To:** Palumbo, Janice  
**Cc:** Shuster, Kenneth  
**Subject:** FW: Small Arms Ammunition Question

Jan,

## Deliberative Process / Ex. 5

Harry

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**From:** Oliver, Debra [<mailto:Debra.Oliver@kingcounty.gov>]  
**Sent:** Friday, June 05, 2015 3:13 PM  
**To:** Craig, Harry  
**Cc:** McFadden, Kelly; Mitchell, Julie  
**Subject:** RE: Small Arms Ammunition Question

Thanks so much for getting back to me! I was asking about small arms ammunition that any resident in our County might have stored, e.g., for target practice or hunting; typically less than 50 caliber conventional ammunition. In our County, law enforcement officers have collected it from the public, but are asking if our moderate risk waste facilities can help them out. We are exploring all facets of the issue, including what happens if no one collects the ammunition.

The information you included in the email thread is useful to us. I'll pass it on to Julie Mitchell, who coordinates the moderate risk waste collection facilities for King County. Craig, I noticed you left me a voice message. I'm going to defer now to Julie who is part of the committee making the final recommendations. Should she have further questions, she will call. Julie's phone number is 206-477-5283.

Thanks so much for the assistance!  
Debra

*Debra Oliver*  
IRAC Operations Manager  
206-263-1664

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**From:** Craig, Harry [<mailto:Craig.Harry@epa.gov>]  
**Sent:** Friday, June 5, 2015 10:55 AM  
**To:** Oliver, Debra  
**Cc:** McFadden, Kelly  
**Subject:** FW: Small Arms Ammunition Question

Debra,

I am EPA's Regional technical specialist on explosives, propellants, and energetic materials in general. Would you like to set up a time to talk about any specific issues related to small arms ammunition in waste streams?

My phone number is 503-326-3689, and I am located in Portland.

Regards,

Harry Craig

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**From:** McFadden, Kelly  
**Sent:** Thursday, May 28, 2015 1:35 PM  
**To:** Craig, Harry; Shuster, Kenneth; Schanilec, Kevin  
**Cc:** Palumbo, Janice; Hoffman, Erika  
**Subject:** RE: Small Arms Ammunition Question

Harry,  
I don't know anything more than the original request (below). Can you give Deborah a call and see what would be of use to her?

Thanks.

Kelly McFadden, Manager  
U.S. EPA Region 10  
Pesticides and Toxics Unit  
1200 -6th Avenue, Suite 900, OCE-084  
Seattle, WA 98101  
206-553-1679

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**From:** Craig, Harry  
**Sent:** Wednesday, May 27, 2015 5:48 PM  
**To:** Shuster, Kenneth; Schanilec, Kevin; McFadden, Kelly  
**Cc:** Palumbo, Janice; Hoffman, Erika  
**Subject:** RE: Small Arms Ammunition Question

All,

Is the question from King County related to commercial fireworks, commercial small arms ammo, military small arms ammo, or military munitions containing high explosives? I couldn't tell what they were asking about. These all have different properties, chemical compositions and different hazards.

I have worked on cleanup of military munitions sites for the past 25 years.

Regards,

Harry

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**From:** Shuster, Kenneth  
**Sent:** Wednesday, May 27, 2015 10:43 AM  
**To:** Schanilec, Kevin; McFadden, Kelly  
**Cc:** Craig, Harry  
**Subject:** RE: Small Arms Ammunition Question

Kevin,

I assume you are talking about conventional rather than chemical/biological munitions (there are lots of reports on the latter). Unused munitions are products, not wastes, and therefore not regulated under RCRA...unless they leak into the

environment, in which case they are considered "waste." Fired munitions that fail to go off are unexploded ordnance (UXO), and those that go off disperse contaminants into the environment. Unused munitions that are treated ("disposed of") by open burning or open detonation (considered to be "waste") also disperse contaminants into the environment, including explosive chunks, or "kick-out."

There are two types of hazards (regardless of whether product or waste): 1) safety/explosive/reactive, and 2) health and environmental from constituents/contaminants. Harry Craig, EPA Reg 10 (Portland, OR) has numerous reports on the constituents/contaminants and their effects. Regarding safety/explosives hazards, I did a report in 2001 documenting over 100 incidents of civilian injuries and deaths from military unexploded ordnance (UXO).

Ken Shuster  
703-308-8759

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**From:** Schanilec, Kevin  
**Sent:** Wednesday, May 27, 2015 12:29 PM  
**To:** McFadden, Kelly; Shuster, Kenneth  
**Subject:** RE: Small Arms Ammunition Question

Ken – I see you are the contact for munitions et al. Do you know of perhaps a background document from rule making that might shed some light on the potential hazards of unused ammunition? The requestor is from King County government (basically, Seattle and the metropolitan area), so one of our partners.

Thanks!

Kevin

Kevin Schanilec  
Senior Enforcement Engineer  
EPA Region 10 (OCE-127)  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101  
206-553-1061

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**From:** McFadden, Kelly  
**Sent:** Tuesday, May 26, 2015 10:11 AM  
**To:** Schanilec, Kevin  
**Subject:** FW: Small Arms Ammunition Question

Kevin,  
I seem to remember that you are a RCRA expert in ammo ☺

Kelly McFadden, Manager  
U.S. EPA Region 10  
Pesticides and Toxics Unit  
1200 -6th Avenue, Suite 900, OCE-084  
Seattle, WA 98101  
206-553-1679

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**From:** Oliver, Debra [<mailto:Debra.Oliver@kingcounty.gov>]

**Sent:** Thursday, May 21, 2015 5:47 PM

**Subject:** Small Arms Ammunition Question

Hello,

I wondered if you knew of any problems caused by unused ammo – fires, explosions, problems in solid waste, injuries, deaths?

Thanks for any information you can share,

Debra

***Debra Oliver, Investigator III***

*IRAC Operations Manager*

Interagency Resource for Achieving Cooperation (IRAC)

Local Hazardous Waste Management Program in King County

206-263-1664

[www.HazWasteHelp.org/IRAC](http://www.HazWasteHelp.org/IRAC)

[www.HazWasteHelp.org](http://www.HazWasteHelp.org)



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